

COMMENTS ON:
COST-EFFECTIVENESS OF WATER QUALITY
INTERVENTIONS FOR PREVENTING
DIARRHOEAL DISEASE IN DEVELOPING
COUNTRIES

by Clasen, Haller, Walker, Bartram and Cairncross

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Goal of Study

- ① Comparison of cost effectiveness of various water quality interventions
 - Non-piped Source
 - Household chlorination
 - Household filtration
 - Household solar disinfection
 - Household flocculation/disinfection
- ② Sector-wide
- ③ Populations with comparable health systems
- ④ Use Cost Effectiveness Analysis (CEA)
- ⑤ Effectiveness data from 30 randomized studies in 21 countries

Economic Costs

- ① “Central Administration, research and professional development costs were excluded”.
- ② Household disinfection costs not region specific
- ③ Calculation of health sector cost offsets from programs
- ④ Excluded “patient costs”
- ⑤ Excluded secondary costs (air pollution from boiling water)
- ⑥ Do not address how these are financed.

Robustness of results

Big result is “expansion path”:

- Start with household chlorination
- End with household based filtration.
- Other approaches are dominated (more costly and less effective).

Uncertainty:

- If we look at lower bound of the range, chlorination is third most expensive and second most expensive
- At the lower bound filtration is most expensive.

Heterogeneity

- ① Household location (country, rural)
- ② Social network
- ③ Preferences
- ④ Costs of implementation
- ⑤ Maintenance
- ⑥ Water Quality

Results should be interpreted as “average”.

Room For Revealed Preference Approach?

- ❶ Individual households have private information
- ❷ May not do what is “best” for them.
- ❸ Existing approach: Randomized trials of one option versus no option
- ❹ New Approach: Randomized trials of multiple options.
- ❺ Alternative: Use existing patterns of usage to estimate benefits from “revealed preference”.